# 5 Grant Application Attachment 3: Work Plan

# 5.1 Background

# 5.1.1 History

In 2002, the State established the Integrated Regional Water Management Grant Program, to encourage communities to develop IRWMPs and better coordinate regional solutions to California's water resource issues. In addition, these IRWMPs could then be used to support competitive grant applications to help fund implementation of projects that improve the state's water supply reliability, water quality, and the environment.

In 2005, six agencies within Los Angeles County (See Figure 5-1) applied for these planning grants; the Santa Monica Bay Restoration Authority, the Watershed Conservation Authority, the Upper San Gabriel Basin Municipal Water District, the West Basin Municipal Water District, the City of Los Angeles, and the City of Downey. Eventually, DWR proposed a single grant of \$1.5 million and that the six agencies prepare one integrated plan for the entire region. This led to the formation of the Greater Los Angeles County Region (GLAC).

Some Gateway Cities participated in the development of the GLAC IRWMP. However, the GLAC IRWMP encompassed an area spanning parts of four counties and 2,200 square miles and representing a population of over 10 million people. It did not address the needs, concerns, and water management issues of the Gateway Cities and their disadvantaged communities (Figure 5-2). Thus, in 2006 the Gateway Cities Council of Governments directed the formation of a Joint Powers Authority specifically to address regional planning and implementation of water resources projects.

Following consultation with DWR, representatives from Gateway Cities established the Gateway IRWM Authority in 2007. The Gateway Authority would lead the integrated regional water management needs of all 26 mainland Gateway Cities and replace their participation in the GLAC. In the ensuing period, DWR's Regional Acceptance Process (RAP) established the Gateway Authority IRWMP JPA Region, acknowledging and establishing the area in the Lower San Gabriel and Lower Los Angeles watersheds, and home to two million people, as a separate entity.

The Gateway Cities are uniquely and closely bound together, not only as close neighbors, but they form a distinct region within the Greater Los Angeles and South Coast area. Opportunities and issues held in common by the Gateway Cities and different from other South Coast communities include:

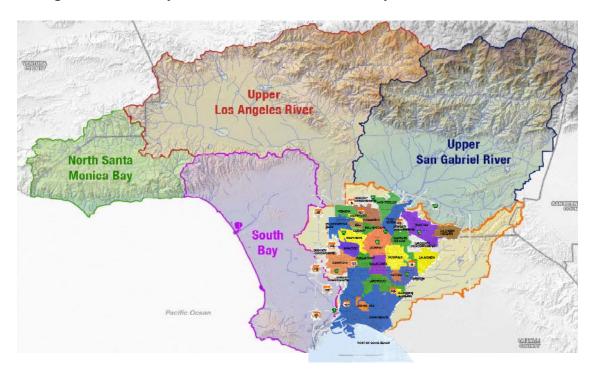
- Use of the same groundwater basin
- Primary water issues of water quality and storm water runoff
- A relative economic disadvantage within the South Coast and Los Angeles County

CITY OF LOS ANGELES LOS ANGELES COUNTY Watershed Conservation Authority Santa Monica Bay Restoration Authority UPPER SAN GABRIEL VALLEY MWD CITY OF DOWNEY Pacific Ocean WEST BASIN MUNICIPAL W.D. Santa Monica Bay Restoration Commission ORANGE CITY OF DOWNEY UPPER SAN GABRIEL VALLEY M.W.D. WEST BASIN M.W.D.

Figure 5-1 Agencies Submitting IRWMP Planning Grants, 2005

Figure 5-2 Gateway Cities and Greater L.A. County IRWMP

CITY OF LOS ANGELES



- Future growth projections
- Common geography
- Generally similar demographics
- Other regional issues, like transportation, that these cities are already solving jointly

# The Gateway Region IRWMP will:

- Organize and coordinate water management activities on a sub-watershed level
- Detail project work across city boundaries on common problems
- Receive distinct input from local stakeholders and provide meaningful, applicable comments to better serve those communities
- Provide greater local "buy-in" for local and regional actions
- Provide strong, accountable leadership and governance based on the JPA's structure

The Gateway Authority plans to effectively integrate with neighboring IRWMPs by actively collaborating with other regions on projects and issues and by attending meetings, providing agendas, reports, and minutes to other organizations. The Gateway Authority has already met with the Santa Ana Watershed Project Authority (SAWPA), which borders its eastern boundary, to discuss potential interregional projects. The Gateway Authority welcomes representatives of the GLAC, its northwestern neighbor, at its monthly meetings to liaison and share information. In addition, the Gateway Authority keeps in touch with many other regions through *Basecamp*, a project management and collaboration system in use by a majority of the regions through the Roundtable of Regions.

# 5.1.2 Regional Agency

In 2007, the Gateway Cities formed an official JPA (Gateway Authority) under California law to steer their planning efforts and provide solid governance for the IRWMP development and implementation. Figure 1-2 shows a map of the cities and districts currently participating in the Gateway Authority. The Gateway Authority is the "Regional Agency" or RWMG and was created to develop integrated plans for managing water supply, equitable resource protection, storm water runoff, sanitation, water quality, and habitat restoration efforts in the Gateway Region.

The Gateway Region is a defined area comprised of the 26 mainland Gateway Cities in Southeastern Los Angeles County, and several adjoining unincorporated communities. The original signatory Gateway Authority members were the Southeast Water Coalition (SEWC), the Long Beach Water Department (a charter department with its own governing body), and the Cities of, Cerritos, Downey, Lakewood, Long Beach, Norwalk, Paramount, Pico Rivera, Santa Fe Springs, Signal Hill, South Gate, Vernon, and Whittier. Since then, Central Basin Municipal Water District (CBMWD) and the cities of Bellflower and Commerce have joined;

the city of Bell Gardens is joining in October 2010 (a city resolution was signed in September), and the city of Lynwood is expected to join shortly thereafter.

By definition, each member agency of the Gateway Authority is there willingly, and by resolution of its governing body. These governing bodies are committed to an integrated management of its shared water-related issues—issues that can be effectively communicated to its local citizens. The Gateway Authority is proactively engaged in outreach efforts. Other participants are expected to join the Gateway Authority and expand the Region's current geographic area as the Region's IRWMP development continues. The following lists potential participants in the governing body:

- Artesia
- Compton
- Cudahy
- Hawaiian Gardens
- Huntington Park
- La Habra Heights
- La Mirada
- Montebello

The JPA format as provided by Government Code Section 6500 et. seq. allows the Gateway Authority to have administrative and legal powers common to its members. With this trait, the Gateway Authority can administer or conduct projects for its members. The Gateway Authority allows the Gateway Cities to develop an integrated plan specific to the Gateway Region's unique area. Each of these agencies are allowed one representative on the governing board with one vote each and an alternate authorized to vote if that representative is absent. All members are actively engaged in the IRWM process and intend to adopt the plan once it is complete. Representatives serve two-year terms and are appointed by an agency's legislative body, but are not required to be a member of that legislative body. A three-fourths vote of the entire board is necessary to approve the budget and contracts over \$100,000. The Board has assessed itself a yearly fee of \$15,000 per member to support administrative costs and to support other programs in addition to the effort to secure funds allocated for Los Angeles County projects through Proposition 84. The City of Downey has volunteered to be the lead agency and manages its finances.

Over the course of several decades, member agencies have developed strong relationships through integrated planning and a variety of projects that have improved communities in the Gateway Region. Because of their communities' uniform level of urban development, similar geographic features and economic characteristics, the Gateway Cities have challenges and opportunities that differentiate the Gateway Region from the other cities in the County and across the state.

It is important to note that California law allows only government agencies to be members of a JPA; governmental agencies are not required to join in order to participate; and non-

governmental agencies are welcomed and encouraged to participate, regularly appearing on the agenda for presentations and input at the meetings of the governing board.

# 5.1.3 Participating Agencies

Participating agencies are actively engaged in the Gateway Authority. Other participants are expected to join the Gateway Authority over the next few months and expand the geographic area. The Gateway Agencies that are signatory to the Gateway Authority are described in Appendix A.

# 5.1.4 Summary of Participating Agencies

All Gateway Authority members listed in Table 5-1 have statutory authority over water supply and water management, the nature of which is also described in Table 1-1. Each Gateway Authority member is responsible for facilitating and actively participating in the IRWM planning and implementation process.

The governing body of the Gateway Authority will expand as additional government agencies join the regional planning effort. Gateway Authority members are actively pursuing stakeholders through multi-faceted outreach efforts. The Gateway Authority has identified a working list of potential members and stakeholders in the Gateway Region, which will be expanded throughout the process of developing the IRWMP. Stakeholders will be invited to participate, provide input, and attend meetings, and their contributions will be included throughout the planning process. The list below represents diverse interests and promotes a collaborative effort in developing an IRWMP for the Gateway Region.

Table 5-1 LA Gateway IRWM JPA Board Composition (Gateway Authority or GA)

Member	Role	RWM Responsibilities	Level of Participation	Plans to Adopt IRWMP
*SEWC JPA	GA Member	SEWC is its own JPA comprised of potable water purveyors and other entities concerned with public water supplies. The SEWC JPA was formed to maintain the quality and reliability of groundwater, implement groundwater management policies, and protect and enhance water storage.	Actively Engaged	Plans to Adopt

City of	GA	Bellflower is primarily a residential area and home to over 75,000 residents. It is served by the Bellflower Somerset Mutual Water Company, the Park Water Company, and the Bellflower Municipal Water System (BMWS), which is operated by the City. The BMWS consists of 1,812 service connections to eight sub-systems within the city area. Water supply is served through the operation of City wells or through service interconnections with Bellflower Somerset Mutual and Park Water Companies.	Actively	Plans to
Bellflower	Member		Engaged	Adopt
City of Bell	GA	Bell Gardens has a population of about 45,000 people. The city contracts with Southern California Water Company to operate the water services and uses about 1,200 acre-ft annually. Bell Gardens retains about 1,900 adjudicated water rights to the Central Groundwater Basin.	New	Plans to
Gardens	Member		Member	Adopt
*City of Cerritos	GA Member	The City retails water to its customers, using imported water from the CRA and SWP and mostly groundwater from the Central Groundwater Basin for potable water supplies. It also meets non-potable demands with recycled water. The City also wholesales potable water to the Golden State Water Company and the City of Norwalk.	Actively Engaged	Plans to Adopt
City of	GAA	The population of Commerce is about 14,000. Residential, commercial, and industrial water services are provided by California Water Service Company throughout 90% of the City. Cal Water provides utility services to the area using a combination of local groundwater and purchased water from MWD/CBWMD.	Actively	Plans to
Commerce	Member		Engaged	Adopt
*City of Downey	GA Member (Sec./Treas and Lead Agency)	The City provides potable water to 96% of the City area with the Central Groundwater Basin serving as the principal source of water. The remaining part of the City is served by the City of Santa Fe Springs and the Golden State Water Company. It only imports water from CBWMD on rare occasions but is still a sub-agency. The City purchases reclaimed water from CBMWD and maintains emergency interconnections with the cities of Santa Fe Springs and South Gate.	Actively Engaged	Plans to Adopt

*City of Lakewood	GA Member	Lakewood retails water to customers west of the San Gabriel River using groundwater from the Central Groundwater Basin for 100% of its potable water. The City of Lakewood Department of Water Resources operates as a municipal water utility. The City also owns a portion of the Peerless Water Company, which served about 105 Lakewood residents as of 2001. The customers on the east are serviced by the Golden State Water Company. The City maintains two emergency inter-connections with the City of Cerritos and the Golden State Water Company.	Actively Engaged	Plans to Adopt
*City of Long Beach	GA Member	The City of Long Beach and the Long Beach Water Department are both represented on the JPA. The LBWD retails water to its customers. LBWD supplies include recycled water, ground- water, MWD wholesale supplies, and potentially desalinated seawater. The LBWD purchases about 50% of its water wholesale from the MWD.	Actively Engaged	Plans to Adopt
City of	Membership	The City of Lynwood maintains 7 active water wells and a 3 million gallon reservoir. The City pumps 5,000 acre-feet of ground-water per year, and purchases another 2,000 acre-feet per year for about 9,000 customers.	New	Plans to
Lynwood	in Progress		Member	Adopt
*City of	GA Member	The City operates a water agency, the Norwalk Municipal Water System (NMWS), and serves small portions of Norwalk and the City of Artesia. The rest of the City is served by Park Water Company, Golden State Water Company, and the Cities of Santa Fe Springs and Cerritos through NMWS. NMWS includes 5 distinct, non-contiguous service sectors throughout Norwalk.	Actively	Plans to
Norwalk	(Vice-Chair)		Engaged	Adopt
*City of	GA Member	The City of Paramount's Department of Public Works is responsible for maintaining all city-owned facilities, substructures, land, and streets, and is responsible for the water supply. The department also develops and manages the City's Capital Improvement Program. The City utilizes three water sources in groundwater, imported water, and recycled water and also has three interconnections with the City of Long Beach Water Department. Although the City serves the majority of the Paramount's water	Actively	Plans to
Paramount	(Chair)		Engaged	Adopt

		supply needs, two northern portions are		
		serviced by the Southern California Water		
		Company.		
		The City of Pico Rivera is served by two water		
		districts, the City of Pico Rivera Water Authority		
		(PRWA) and the Pico Water District (PWD).		
*City of	GA Member	PRWA provides drinking water to approximately	Actively	Plans to
Pico Rivera	dA Member	9,200 customers. The City distributes and treats	Engaged	Adopt
		drinking water. Groundwater is the major water		
		supply for the city.		
		The City's Department of Public Works is		
		responsible for development and maintenance		
		of infrastructure, parks, and facilities. It		
		administers the Capital Improvement Program		
*C:+,, of		through a combination of in-house engineering		
*City of Santa Fe	GA Member	staff and professional engineering consultants.	Actively	Plans to
	GA MEMBE	The City's potable water system is supplied by	Engaged	Adopt
Springs		two water wells, two MWD connections, and		
		·		
		two 4MG reservoirs. Additionally, irrigation		
		needs are met using reclaimed water in many		
		locations.		
		The City of Signal Hill Public Works Department		
*C:+v of	GA Member	is comprised of 6 divisions: Water Department;	A ativaly	Dlans to
*City of		Environmental Programs; Street, Grounds, and	Actively	Plans to
Signal Hill		Building Maintenance; Engineering and Project	Engaged	Adopt
		Services; Vehicle and Equipment Maintenance;		
		and Landscape and Lighting Maintenance.		
		The City of South Gate is a member city of the		
*City of	CA Marahan	CBMWD, although it does not presently	Actively	Plans to
South Gate	GA Member	purchase water through it and instead meets	Engaged	Adopt
		water demand with groundwater pumping		
		through 14 wells.		
		The City of Vernon's Water Division retails		
		water to approximately 1075 customers. The		
*C:+f		City of Vernon uses three water sources:	A ati a l	Dlamaka
*City of	GA Member	groundwater, recycled, and purchased water	Actively	Plans to
Vernon		through the CBMWD. The City's service area is	Engaged	Adopt
		primarily comprised of commercial and		
		industrial users, taking up about 97% of the		
		accounts.  The City of Whittier provides water service,		
		sewer maintenance and repair, and storm water		
*City of		· · ·	Activoly	Dlans to
*City of	GA Member	and runoff pollution control. The City's main	Actively	Plans to Adopt
Whittier		water resource is groundwater from the Main San Gabriel and Central Basins. The City has not	Engaged	Αυυρι
		1 ·		
		needed to import water due to a primary use of		

		groundwater and recycled water and the		
		implementation of conservation and future		
		water supply programs.		
		CBMWD is a public agency that purchases		
*CBMWD	GA Member	imported water from MWD and wholesales that	Actively	Plans to
	GA Member	water to 24 cities, mutual water companies,	Engaged	Adopt
		investor-owned utilities, and private companies.		

<sup>\*-</sup> indicates statutory authority over water supply and water management.

Table 5-2 summarizes basic demographic information for the participating Gateway cities. Data is based on 2006 American Community Survey Data, available from American Fact Finder at <a href="http://factfinder.census.gov">http://factfinder.census.gov</a>.

**Table 5-2 LA Gateway Region Demographics** 

City	Ave. House- hold Size	Median House- hold Income	Per Capita Income	Individuals Below Poverty Level	Families Below Poverty Level	18 & Over	Unemployment Rate <sup>3</sup>
Artesia	3.54	\$44,500	\$15,763	11.5%	8.7%	72.8%	9.4%
Bellflower	3.36	\$46,442	\$17,092	14.9%	9.8%	67.3%	13.2%
Bell Gardens <sup>2</sup>	4.61	\$30,597	\$8,415	27.3%	25.3%	60.5%	20.3%
Cerritos	3.34	\$73,030	\$25,249	5.0%	4.0%	75.5%	7.1%
Commerce <sup>2</sup>	3.80	\$34,040	\$11,117	17.9%	15.4%	66.2%	23.9%
Compton <sup>2</sup>	4.16	\$31,819	\$10,389	28.0%	25.5%	61.5%	21.7%
Cudahy <sup>2</sup>	4.47	\$29,040	\$8,688	28.3%	26.4%	60.1%	17.9%
Downey	3.11	\$45,667	\$18,197	11.1%	9.3%	70.8%	10.5%
Hawaiian Gardens <sup>2</sup>	4.21	\$34,500	\$10,728	22.2%	19.8%	63.2%	14.6%
Huntington Park <sup>2</sup>	4.12	\$28,941	\$9,340	25.2%	23.3%	64.2%	19.1%
La Habra Heights	3.03	\$101,800	\$47, 258	3.4%	2.0%	75.5%	5.4%
La Mirada	3.10	\$61,632	\$22,404	5.6%	3.7%	73.8	8.0%
Lakewood	3.36	\$71,707	\$24,106	4.7%	3.7%	72.4%	8.5%
Long Beach	2.84	\$45,906	\$22,908	19.8%	16.4%	71.8%	14.2%
Lynwood <sup>2</sup>	4.70	\$35,888	\$9,542	23.5%	21.0%	62.0%	20.2%
Maywood <sup>2</sup>	4.33	\$30,480	\$8,926	24.5%	23.1%	63.0%	18.6%
Montebello	3.28	\$38,805	\$15,125	17.0%	14.2%	71.4%	14.4%
Norwalk	3.79	\$46,047	\$14,022	11.9%	9.5%	67.9%	13.7%
Paramount <sup>2</sup>	3.93	\$36,749	\$11,487	21.9%	19.1%	63.1%	18.7%
Pico Rivera	3.83	\$45,564	\$13,011	12.6%	11.6%	69.0%	12.1%

Santa Fe Springs	3.35	\$44,540	\$14,547	12.5%	8.0%	70.9%	10.9%
Signal Hill	2.56	\$48,938	\$24,399	17.2%	13.6%	73.6%	10.4%
South Gate <sup>2</sup>	4.15	\$35,695	\$10,602	19.2%	17.4%	64.4%	16.4%
Vernon	3.64	\$60,000	\$17,812	0.0%	0.0%	62.6%	0.0%
Whittier	2.88	\$49,256	\$21,409	10.5%	7.8%	71.7%	9.3%

- 1. Based on 2000 Census information.
- 2. Disadvantaged communities.
- 3. Obtained from State of California, Employment Development Division, Monthly Labor Force Data for Cities and Census Designated Places (CDP), August 2010

Approximately 47 percent of the households within the larger Gateway regional boundary are considered disadvantaged.

# 5.1.5 Description of the Region

# 5.1.5.1 Regional Setting

The Gateway Cities are located in Southeast Los Angeles County, in an area that includes a large expanse of flat land located around the lower reaches of the Los Angeles and San Gabriel Rivers. A former floodplain with a rich soil base and high water percolation rate, the region had small cities and a large agricultural base until the suburban population boom following World War II. Following channelization of the lower reaches of the Los Angeles and San Gabriel Rivers by the Army Corps of Engineers, the area became ideal for industrial development and large-scale urbanization. This creates a unique situation for the area's water needs and requires consideration in order to effectively manage water resources.

The geography of the Region includes coastal plains, inland valleys surrounded by foothills, and two mountain ranges; the Santa Monica and the San Gabriel Mountains, which are a part of the Traverse Ranges. To the north, the San Gabriel Mountains separate the Los Angeles Basin from the Mojave Desert and the Santa Monica Mountains separate the Los Angeles Basin from the Ventura Basin to the west. Elevations in the Gateway area range from sea level to a few hundred feet. Alluvial deposits of sand, gravel, clay, and silt are present in the coastal plain due to erosion of the mountains. The area is also situated on and near extensive fault systems, generally trending northwest to southeast. Large nearby faults include the San Andreas and the Sierra Madre-Cucamonga Faults.

The Region has a Mediterranean climate, characterized by mild temperatures with wet winters and dry summers. Most precipitation falls between November and March averaging 12 inches of rainfall each year. The Gateway Region drains into San Pedro Bay by the Los Angeles and San Gabriel Rivers. These two watersheds are connected by the Rio Hondo, which transfers water from the San Gabriel River to the Los Angeles River during significant

storm events. Rivers, major creeks, and tributaries are channelized due to extensive urbanization of the region.

Based on year 2000 estimates, the Gateway Cities are home to almost two million people over a land area of just over 200 square miles. The per capita income is about \$19,000. The area is nearly built-out with a household annual growth rate of less than 1 percent and a median household income of about \$46,000. Additionally, the Gateway Cities include several disadvantaged communities (described in Section 5.1.23) and unemployment for the region averages 13.8 percent.

## 5.1.5.2 Surface Water Supplies

While surface water is available to Gateway Cities from the State Water Project from Northern California or the Colorado River Aqueduct, most Gateway Cities rely primarily upon groundwater. The surface waters are provided by the Metropolitan Water District of Southern California (MWD) to the cities of Long Beach and Compton and to the CBMWD, which in turn makes water available to other cities, retail water districts, and water companies for the consumer. There are many interties between individual retailers. Local surface water is not generally a source for the Gateway Region.

# 5.1.5.3 Groundwater Supplies

Most of the Gateway Region overlies the Coastal Plain of Los Angeles, Groundwater Basin, Central Sub-basin, or generally called "Central Basin." This groundwater basin is the primary source of supply of the region. Most retailers employ production wells to provide at least a portion of their municipal supply, if not the majority of their supply.

The Central Sub-basin occupies a large portion of the southeastern part of the Los Angeles Coastal Plain, bounded on the north by the La Brea High and on the northeast and east by less permeable tertiary rocks. The Southeast boundary is formed by the Newport-Inglewood fault system and associated formations (DWR Bulletin 118). Throughout the Central Basin, groundwater occurs in Holocene and Pleistocene age sediments at relatively shallow depths. The Central Basin is historically divided into forebay and pressure areas. Recharge to the sub-basin is accomplished through both natural and artificial recharge. The Watermaster reported natural recharge for the sub-basin to be 31,950 acre-feet and artificial recharge to be 63,688 acre-feet for 1998 (DWR 1999). Additionally, the sub-basin receives 27,000 acre-feet of water per year through the Whittier Narrows from the San Gabriel Valley Basin in the form of subsurface flow (SWRB 1952). Urban extractions for the sub-basin were 204,335 acre-feet in 1998.

## 5.1.5.4 Groundwater Quality

Groundwater supplies are generally of acceptable quality. Total dissolved solids (TDS) content in the Central Basin ranges from 200 to 2,500 mg/l according to data from 293 public supply wells. The average for these 293 wells is 453 mg/l. Protecting groundwater quality from contamination is especially important to the Gateway Region, particularly in light of its historical role as a center of manufacturing and technology. Efforts to improve groundwater quality are ongoing, including recent efforts to clean up a waste solvent and hydrocarbon plume under the cities of Whittier, Santa Fe Springs and Norwalk.

# 5.1.6 Water Management

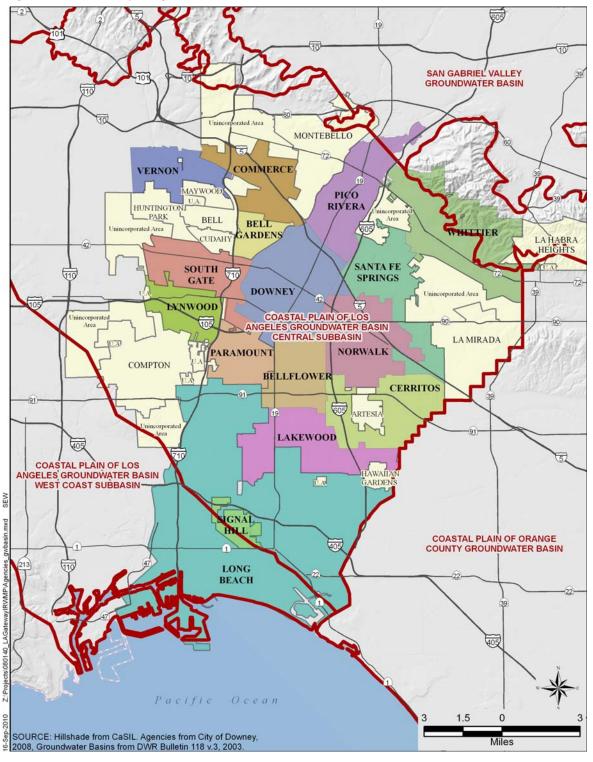
The Gateway Cities have formed a strong relationship through integrated planning and a variety of projects geared towards improving the communities of their region. A large part of the foundation of that relationship is comprised of the water management practices and strategies the various entities of the Gateway Authority have undertaken.

# 5.1.7 Water Management Activities in the Region

# 5.1.7.1 Central Sub-basin Groundwater Adjudication

Groundwater basin adjudication, a court determination of groundwater rights in a groundwater basin, has been enacted in 19 groundwater basins in California. Central Basin is one of those adjudicated basins, and as such, a court has decided who is permitted to extract water, determined the amount that can be extracted, and appointed a Watermaster, the organization or individual responsible for managing the basin according to the court's decisions. The Central Sub-basin of the Coastal Plain of Los Angeles Groundwater Basin was adjudicated in 1965, and the judgment was later amended in 1991. DWR was appointed as the Watermaster. Monthly groundwater extractions are reported to the Watermaster by each individual pumper, which allows the regulation of water rights in the basin. The adjudication allows for up to a 20 percent carryover of annual pumping rights for one year and a 35 percent carryover under "drought carryover" provisions. It also allows for 20 percent over-pumping, to be paid back the following year or prorated over the following 5 years. Additionally, exchange pools may allow rights not being used by one party to be made available to another. Figure 5-3 shows the Central Sub-basin in relation to the Gateway Authority members.

**Figure 5-3 Gateway Region and Groundwater Basins** 



# 5.1.7.2 Greater Los Angeles County Region IRWMP

On December 13, 2006, the Greater Los Angeles County Region (GLAC) adopted an Integrated Regional Water Management Plan. As described previously, the GLAC Region originally contained over 10 million residents and hundreds of agencies and districts with water management responsibilities.

The GLAC, now a neighbor to the Gateway Region, hopes to secure outside funding sources to support its planning efforts and regional projects by developing an IRWMP for solving local problems.

# 5.1.7.3 Southeast Water Coalition Joint Powers Authority

The Southeast Water Coalition (SEWC) is a joint powers authority that includes the cities of Cerritos, Commerce, Downey, Huntington Park, Lakewood, Norwalk, Paramount, Pico Rivera, South Gate, Vernon, Whittier, and the Water Replenishment District of Southern California. It represents a population of over 6.5 million that spans an area of nearly 100 square miles. Effective in July 2001, the original agreement was amended in June 2005 to extend to the year 2030. SEWC represents potable water purveyors or other entities concerned about public water supplies with the objective of maintaining the quality and reliability of groundwater, implementing groundwater management policies, and protecting and enhancing water storage.

# 5.1.7.4 Urban Water Management Plans

Water purveyors with more than 3,000 customers or providing more than 3,000 acre-feet of water annually are required under the California Urban Water Management Planning Act to update and adopt an Urban Water Management Plan (UWMP) every 5 years. These plans are reviewed by DWR for completeness. UWMPs provide a water plan for each agency that includes drought planning and water conservation measures undertaken by the purveyor within the 20-year planning horizon.

Collectively UWMPs also represent a water management planning effort within the region. With any regional planning effort the local UWMP must be compatible and integrated into the overall planning effort, particularly as retail agencies and wholesale agencies collaborate to anticipate future demands.

Most cities have plans developed for 2005 on file with DWR, but not all plans have been deemed complete. DWR staff is working with many cities and purveyors in the region to complete their 2005 plans. Because 2010 plans are due in mid-2011, creating the 2010 UWMPs may take priority over updating the 2005 plans. Table 5-3 summarizes the current status.

Table 5-3 Summary of the Status of 2005 Urban Water Management Plans

(Updated 8-13-2010, CA DWR)

	(Updated 8-13-2	UIU, CA DWK)					
	Connections	Submitted	DWR Rev'd yet?	Complete?	Informed		
City of Artesia		2/7/2006	Yes	No	N/A		
City of Bellflower		Submittal not required					
City of Bell Gardens		2/7/2006	Yes				
City of Cerritos	15,710	5/5/2006	Yes	Wkg/DWR	N/A		
City of Commerce		Su	bmittal not required				
City of Compton		5/24/2006	No				
City of Cudahy		Su	bmittal not required				
City of Downey	22,545	2/24/06	Yes	Yes	3/24/09		
City of Hawaiian Gardens		Su	bmittal not required				
City of Huntington Park		12/27/2005	No				
City of La Habra Heights		Su	bmittal not required				
City of La Mirada		Su	bmittal not required				
City of Lakewood	20,589	12/27/05	Yes	Yes	9/28/06		
City of Long Beach	90,000	12/21/05	Yes	Yes	6/4/07		
City of Lynwood		12/30/2005	Yes	No	N/A		
City of Maywood		Su	bmittal not required				
City of Montebello		Su	bmittal not required				
City of Norwalk	4,497	1/24/06	Yes	Wkg/DWR			
City of Paramount	7,700	12/22/05	Yes	Wkg/DWR			
City of Pico Rivera	9,500	9/06	Yes	Wkg/DWR			
City of Santa Fe Springs	5,877	1/26/06	Yes	Wkg/DWR			
City of Signal Hill		Su	bmittal not required				
City of South Gate	23,000	7/8/08	Yes	Wkg/DWR			
City of Vernon	1,400	12/27/2005	No				
City of Whittier	11,576	3/13/06	Yes	Wkg/DWR			
CBMWD	N/A	12/28/05	Yes	Yes	1/8/07		

# 5.1.8 Water Management Challenges

There are many water management challenges that have been identified as specific to the Gateway Region stakeholders by the Gateway Authority. They include:

- Groundwater Protection
- Surface Water Protection
- Storm Water Runoff
- Water Quality
- Supply Reliability
- Water System Infrastructure Improvements

- Flood Protection and Response
- Equitable Resource Protection
- Coastal Area Protection
- Wetlands Restoration
- Water Conservation

Urbanization and multiple sources of water supply with varying reliability offer a unique set of challenges to the Gateway Region. Adequate water supply continues to be a major issue in an area characterized by a large population and increasing need to spur economic growth. Cities and water agencies in the Gateway Region have pursued several strategies to effectively manage water supply, including more efficient agricultural and urban water use; recycled water and groundwater conjunctive use; seawater desalination; additional surface storage facilities; and improvements in watershed management. However, issues such as climate change, drought, and over-extraction of groundwater are further challenges to water supply reliability. Additionally, groundwater overdraft may lead to seawater intrusion, subsidence, and legal disputes over pumping rights.

Along with water supply issues, water quality has become a growing concern in the region. Storm water and urban runoff carrying oil, metals, pesticides and other toxic chemicals, and disease-causing pathogens is a major contributor to pollution in creeks and rivers that will eventually lead to the ocean. Sanitary sewer overflows, ocean outfalls, and shipping and boating activities also contribute to questionable coastal water quality. Such conditions raise concerns over increased health risks and the potential impacts on wildlife. On March 4, 2008, the Los Angeles Regional Water Quality Control Board (LARWQCB) sent violation notices to 20 area cities and Los Angeles County threatening to implement fines of up to \$10,000 a day if their beaches continue to fail federal clean-water standards. This unprecedented move to clean up Santa Monica Bay also allows the LARWQCB to ask the state attorney general to seek civil liabilities in court of up to \$25,000 each day a violation occurs.

Groundwater supplies are not immune to contamination. Groundwater quality is continually threatened by DBPs, perchlorate, and industrial solvents, among others. These pollutants can also affect surface water supplies such as water imported from the Colorado River, where there is concern for contamination due to inactive ammonium perchlorate manufacturing facilities in Nevada.

An aging water infrastructure system and the assurance of long term transmission and distribution reliability have become growing concerns for the Gateway Region. As an area with numerous disadvantaged communities, high household poverty rates and chronically high unemployment levels, many of the cities have had and will continue to experience severe funding shortages for water infrastructure upgrading, maintenance, and repair. Urbanization of the area has also had long-term effects on the natural hydrology of the Los

Angeles and San Gabriel Rivers. Water and floodwater control structures, diversions for groundwater recharge, and urban pollution have all contributed to these changes, in addition to affecting wildlife and their habitats.

In light of the many pressing water issues of the Gateway Region, steps are being taken to find solutions to these problems. Ocean water desalination, interstate groundwater banking, water augmentation studies, alternative scenarios for climate change, and evaluation of water supply benefits of flood control reservoirs are just a few of the measures being studied.

#### 5.1.9 Flood

The Los Angeles and San Gabriel Rivers traverse the Gateway Region, and have contributed to the watershed's history of catastrophic floods and flood control challenges. Following a devastating flood in 1914, the State legislature enacted a statute that formed the Los Angeles County Flood Control District. The responsibilities and authority of the Los Angeles County Flood Control District were transferred to the Los Angeles County Department of Public Works in 1985. Flood control efforts are managed through the cooperation of the County Flood Control District, the Army Corps of Engineers, and individual cities.

The Los Angeles Basin has a challenging hydrology and through continuous efforts to control nature, it has been re-shaped in attempts to avoid catastrophes such as the 1934 and 1938 floods. Major flood control structures in the Gateway Region include the Whittier Narrows Dam, levees alongside the Rio Hondo, Los Angeles and San Gabriel Rivers, and the spreading grounds adjacent to the Rio Hondo and San Gabriel River. The Gateway Cities lay at the downstream reaches of the Los Angeles and San Gabriel Rivers, and the flood management issues in the region result from multiple factors including:

- a large metropolitan development upstream;
- urban development in the Gateway Region; and,
- the critical need to control floods and conserve water.

These concerns unite this region in addressing these unique flood management issues. Flood and storm water issues will be included within the IRWMP and the Gateway Authority is looking to integrate flood projects and strategies with projects in the plan. This effort aligns with a statewide priority to better integrate flood projects with ecosystem restoration, water supply and other water management strategies and projects.

# **IRWM Plan Development**

The Gateway Authority has outlined preliminary concepts for the creation of the IRWM Plan. The intent is to develop a plan that will encompass strategies for solving the specific

issues of the Gateway Region and fulfill the requirements of the Proposition 84 and Proposition 1E Integrated Regional Water Management Guidelines provided by DWR. The development is summarized below:

# 5.1.10 Planning Objectives

The goals and objectives for the Los Angeles Gateway Region IRWMP have been identified by the Gateway Authority Vision, Mission, Goals, and Objectives Statement which was adopted on February 14, 2008 at its regular meeting.

# Gateway Region IRWM Plan Goals

- Protect and enhance water quality
- Optimize water supply reliability
- Coordinate and integrate water resource management
- Identify and address the water-related and natural resources needs of the Gateway Region Watershed
- Provide stewardship of our natural resources

# Gateway IRWM Plan Objectives

- Effectively reduce sources of pollutants and environmental stressors
- Reduce the negative effects on waterways and watershed health caused by hydromodification and flooding
- Construct, operate, and maintain habitat and open space
- Optimize open space and water-based recreational opportunities
- Further the scientific and technical foundation of water management
- Effectively obtain, manage, and assess water resources data and information
- Maximize stakeholder and community involvement and stewardship

The adopted plan objectives also state that specific goals, objectives, and implementing strategies will be developed in the IRWMP process with broad and extensive stakeholder involvement.

Additional considerations expressed by participants to embark on an integrated planning process include:

- To be involved in achieving better planning efforts that address regional water needs unique to the Gateway Region and ensuring those needs are adequately identified and prioritized
- To coordinate water management between regional agencies and work together to find economically and environmentally responsible solutions to regional needs
- To ensure equitable resource protection

- To ensure appropriate consideration for federal and state funding
- The ability to integrate specific funding through a sub-regional approach

Groundwater will continue to play a major role in meeting the Gateway Region's future water needs, and it provides a good example of integrating water management strategies. Management of the groundwater resources of the Central Sub-basin; the planning and implementation of projects and programs to enhance and protect groundwater resources; the conjunctive management of surface water and groundwater resources; and the implementation of strategies to optimize groundwater use, especially during droughts, will be key components of this IRWMP.

The objectives developed by the Gateway Authority and the tools generated to analyze groups of projects created to meet these objectives will form the basis for evaluating and refining strategies to be considered in formulation of the Plan. These tools will also be used to examine the degree to which management strategies for the region can be integrated and multi-objective strategies can be identified.

# 5.1.11 Formulation of Water Management Strategies

An important and necessary step in the IRWMP process is to formulate strategies that will be effective in addressing critical water needs and issues for the region. Typical strategies that are generally considered for common water management issues should not be overlooked. However as each region and their set of issues is unique, the strategies and resulting prioritized actions should be tailored to their particular needs.

The Gateway Authority and region stakeholders intend to consider a broad range of water management strategies to address planning objectives to ensure that no good idea is overlooked. The region's significant water issues include water quality, storm water runoff, and water reliability. With those topics as initial targets, the IRWMP planning process can consider various approaches to solve those problems, combine various actions together and evaluate their effectiveness. The planning process will be open and public. Brainstorming additional solution paths is important to help shape alternatives, provide the broadest consideration, and obtain stakeholder commitment in the process. Environmental forces, such as climate change, must also be considered when developing strategies. A central purpose of the process will be to integrate water management initiatives undertaken by each of the participants into a program of integrated projects for the Gateway Region.

The following is a preliminary list of strategies to be considered during IRWMP development:

- Ecosystem restoration
- Environmental and habitat protection and improvement
- Water supply reliability
- Flood management
- Recreation and public access

- Groundwater management
- Storm water capture and management
- Water quality protection and improvement
- Conjunctive use
- Land use planning
- Watershed planning

- Water conservation
- Water recycling
- Imported water
- Storage
- Water and wastewater treatment
- Treatment methodologies
- Water transfers

The IRWMP development work plan will specifically include the following:

- Regional Projects Projects that benefit multiple jurisdictions and communities are a
  priority for the plan and for implementation. The IRWMP process will look
  specifically for those opportunities during the project review and prioritization phase.
- Water Conservation and Water Use Efficiency Water use efficiency has great potential in urban environments like the Gateway Region. Projects focusing on demand management will improve water reliability for the region and the State by reducing the need for imports from other parts of California, and especially the Sacramento-San Joaquin Delta. Landscape water reduction has good potential for reducing demand and the use of storm water runoff locally within the region is an element of efficiency that must be included along with expanded water conservation programs. These strategies are among the statewide priorities for water use efficiency and the statewide priority for water supply reliability that is also under the CALFED Water Supply Reliability Program Objectives.
- Environmental and Habitat Protection and Improvement Projects The IRWMP development process will be looking for projects to improve the limited ecosystem currently in the region. Flood control projects have reduced river environment to mostly concrete channels and there are potential opportunities to expand the environmental stewardship in the region. This supports the statewide priority in this area.
- Protect and Improve Groundwater Quality This is a key issue for the Gateway Region and supports a statewide priority to Protect Surface and Groundwater Quality to safeguard public and environmental health.

While a 2006 Greater Los Angeles IRWMP was developed, this plan did not address the needs and issues of the Gateway Cities region.

# 5.1.12 Project Formulation and Prioritization

Specific projects that are needed to implement the Gateway Regional Plan will be identified. These projects will be prioritized to meet regional water management objectives and to

follow the water management strategies adopted in the plan. A necessary component of the IRWMP will be to identify additional projects that may serve the multi-benefit objective of the Gateway Region and that would address the area's critical needs. All decisions will be finalized by a vote at a regular meeting of the Gateway Authority. An implementation schedule that extends beyond the adoption of the Plan will be developed.

A specific project prioritization process will be developed during the IRWMP planning process. Some of the prioritization factors to be considered will likely include: the urgency of the need for the project (whether there is a safety issue or a fine associated), consistency with objectives, local priorities, whether the project generates the greatest regional benefits at acceptable levels of impact and cost, and the extent to which the project meets planning goals.

These prioritization criteria will be discussed during the planning process. Preliminary criteria include strategies that:

- best meet the stated planning objectives
- have significant potential for preserving health and safety
- provide for reasonable and beneficial use of the state's water resources
- provide for synergy and a broad range of benefits to the communities
- facilitate funding opportunities for implementation of other strategies
- protect and enhance water supply and water quality; especially in economically disadvantaged communities in the region
- identify strategies that are ready for implementation or can be easily implemented
- assist the region in adapting to the potential threats from climate change and/or meet the plan objectives while presenting the least negative impact on climate changeinducing factors such as greenhouse gas emissions

# 5.1.13 Plan Implementation

In addition to creating a framework for prioritizing and selecting projects, the Gateway IRWM planning process will also result in an implementation schedule. The schedule will depend on the types of strategies developed, the costs, the beneficiaries, and the financial abilities of participating agencies. Because the Gateway Authority intends to apply for implementation grant funding on behalf of stakeholders in the Gateway Region, the availability of financial assistance could also affect the implementation schedule.

The Gateway Authority has the authority and will take the lead role in program implementation, which is expected to span many years. As allowed, projects are expected to be implemented under three tiers of authority.

- Regional projects will be implemented by the Gateway Authority
- Multi-agency local projects may be implemented by the Gateway Authority Board of Directors or by agreement between the agencies that benefit from the project

 Local single-agency projects will be implemented by the local agency benefiting from the project

Upon completion of the IRWMP, it is anticipated that all participating agencies will adopt the IRWMP individually as well. Its adoption will signify these agencies' commitment to implementing regional projects.

## 5.1.14 Plan Performance

The IRWMP process must not only develop the Plan but also consider and determine a method of measuring the success of the IRWMP and its implementation. The Gateway Plan will include the development of metrics and procedures on at least the following elements:

- Obtaining and meeting plan objectives
- Stakeholder outreach and involvement
- Monitoring systems that will be used to gather performance data
- Mechanisms to change and adapt implementation and project operations based on the data collected

# 5.1.15 Updating and Amending the IRWMP

The Gateway Authority recognizes the need to effectively adapt to the changes of a growing community, changing laws, project alterations, and environmental factors, including potential vulnerabilities resulting from climate change. The IRWMP development will include a process to efficiently update and amend an existing IRWMP without going through a redundant full plan development. This process will take into account the need for expedient implementation of alterations to the plan as well as provide a clear and open procedure to amend or update the IRWMP. The Plan must be flexible enough to allow for adaptive changes during implementation but not change so frequently as to discourage long-range planning and marginalize stakeholder involvement.

## 5.1.16 Impacts and Benefits

To evaluate alternative strategies and subsequent actions included in the Plan, the relative impacts and benefits of various alternatives must be estimated. For most of the water management issues considered, this implies a measurement of water quantities or water quality parameters. It may also require measuring biological factors, not only in the region, but downstream or upstream in a water supply or water management system. Estimating obvious but uncalculated project benefits, such as the value of expanding open recreational space in densely populated disadvantaged communities, will require the development of new metrics.

Existing monitoring and measurement may likely provide the baseline or even the parameters needed to estimate benefits and impacts. However, additional factors may also be needed,

which will require some increase in the current monitoring or data gathering programs. Comparing impacts and benefits may also require new approaches.

Benefits and impacts may be measured in terms of several parameters:

- Cost
- Energy
- Temperature
- Greenhouse gases
- Carbon
- Management efforts
- Water quality constituents and concentrations

- Water supply reliability
- Timing
- Environmental justice
- Biological habitat
- Health risks
- Risks of upset
- Per capita water use

A process will be developed for determining the impacts and benefits of the plan development and implementation as well as complying with the California Environmental Quality Act as it is applicable to adoption and implementation of the Plan. This is described as a work item below.

# 5.1.17 Data Management

The majority of the data that will be used in the development of the IRWMP is publicly available. However, any new data collected as a result of the IRWMP will be made available to the stakeholders, agencies, and the public through a process developed by the Gateway Authority in coordination with stakeholders. For example, any groundwater quality monitoring performed in conjunction with the IRWMP development or implementation will be integrated into the SWRCB's and DWR's statewide data management efforts.

A data management system will be developed, tailored to the eventual needs of the Gateway Authority and stakeholders. This system will allow sharing of data with Gateway Region consultants, stakeholders, and government agencies and will be eventually managed by the Gateway Authority or its designee. Because of the trend toward GIS-based data management systems, it is likely that the data management system will be GIS-based. However, the specific system is not specified at this time. The consultant will be asked to employ a data system expert to assist with this work.

# 5.1.18 Data and Technical Analysis

Data on water use, flood and storm water events, and water quality constituents have been collected extensively in the region for many years. Precipitation, stream flow, groundwater elevations, groundwater quality, surface water quality, and environmental habitat data are also generally available, and will be needed to evaluate alternatives and then measure the ultimate impact of actions and projects within the region. Urban Water Management Plans

provide projections on future anticipated trends and investments and are available for the Gateway Region.

While a simple comparison of measured parameters before and after an action (or projected after the action) can lead to a satisfactory evaluation of that action or strategy, often the situation is more complicated. There may be a mixed impact or benefit, with various parameters reacting differently. For example, an action may increase water reliability, but decrease water quality. In those mixed cases, impacts and benefits must be studied carefully to weigh the differing parameters with one another. Furthermore, to address the management strategies and objectives developed for the IRWMP, additional monitoring studies may be needed.

# 5.1.19 Relation to Local Planning

Planning documents that have been prepared by the Gateway Authority agencies will be important building blocks of the Plan, as will those planning documents of other cities and agencies, and stakeholders (such as Amigos de los Rios) in the Gateway Region. Local documents will be reviewed to identify local priorities and to review projects that have been formulated to address these priorities. An important function of the Plan will be to integrate the planning that has already been performed by local entities into a group of strategies and projects that meet local needs while also satisfying regional objectives. Preparation of the regional Plan is also likely to strengthen local planning processes.

## 5.1.20 Stakeholder Involvement

The Gateway Authority will conduct public outreach meetings to the stakeholders in the region and will develop a methodology for identifying stakeholders and encouraging and facilitating their participation in the planning and implementation process.

Outreach efforts will ensure that there is potential for all areas of the region to be actively involved. The process for stakeholder identification, participation, and involvement is detailed in Work Items, Task 2.2. The initial list of possible stakeholders would include regional, watershed-based, and state/federal organizations.

## Regional

- Other Gateway Region Cities
- Water companies and water purveyors, both private and public
- Water wholesalers and suppliers to the region, including groundwater, surface water, and recycled water suppliers

# Watershed-based

Environmental advocates

- Watershed councils and organizations
- Local government organizations, such as council of governments
- Business community (including economic and workforce development groups)
- Industry representatives
- Non-profit organizations

# State/Federal

- State and federal resource agencies and departments
- State and federal regulatory agencies

A more detailed initial stakeholder list has been included in Task 2.2. This list is a starting point for invitations to participate in the IRWMP process and does not represent a final roster of organizations or individuals interested in formulating a regional plan. The outreach efforts will expand the potential stakeholders and work to encourage their continued participation.

## 5.1.21 Public Outreach

The Gateway Authority will incorporate an extensive public outreach program into the IRWMP development efforts to equitably and comprehensively represent the range of interests of the Gateway Region. The people of the Gateway Region are ultimately the beneficiaries of the IRWMP and their input is imperative to the process. The Gateway Authority plans to engage the public, including DACs, and encourage their involvement throughout the IRWMP process.

To encourage public participation in the IRWMP process, the Gateway Authority will use a variety of media, including the internet, newspaper, radio, written announcements, brochures, and annual reports. The Gateway Authority intends to retain a public relations professional specifically for the IRWMP process. In addition, workshops, monthly meetings and special meetings will open to the public throughout the IRWMP process and beyond.

A website is currently under development for the LA Gateway Region, a link to which will be provided on individual Gateway Authority member sites and on the Gateway Cities COG website. The Gateway Authority contact information will be posted on the website, with directions on who the public may contact with comments, questions, and concerns. Currently, the point of contact for the public is Annette Hubbell, Executive Officer; Gateway Authority Board members are also public servants. IRWM information, publications, and reports will also be posted on the website. The Gateway Authority will use the website to post meeting notices, agendas, and meeting minutes. Meeting agendas are posted no less than 72 hours before the meeting. Meetings are and will be held on a regular schedule and at a consistent location. Notices will be available one month prior to meetings and the meeting minutes will be posted as soon as possible following Gateway Authority Board approval.

In addition to the Gateway Authority website, meeting announcements will be made via local newspapers, local radio stations, and posted in public places. The meeting agendas and meeting minutes will be posted on individual Gateway Authority member websites, at the meeting location, and in public locations such as city libraries and city buildings.

#### 5.1.21.1 Outreach Process

The proposed public outreach process is summarized below.

## **Initial Public Meeting**

The Gateway Authority plans to hold a public meeting to solicit input from the community regarding the preparation of an IRWMP. The Gateway Authority will publically announce the meeting in local newspapers, on the radio, and on their website, inviting all members of the public to attend. The meeting will be announced per California Government Code Section 6066 and the agenda will be made available no less than 72 hours prior to the meeting.

The purpose of the meeting is to present the public with information about the proposed IRWMP planning process and receive comments from interested parties. The presentation will describe the region encompassed by the IRWMP. Gateway Authority members will answer questions, solicit input, and increase public awareness of the proposed IRWMP. Documentation of the meeting and the comments received from the public will be recorded and made available to the public via the Gateway Authority's website, the Gateway COG website, the local library, and the Gateway Authority members' websites.

#### **Public Involvement Plan**

The Gateway Authority will develop a method and process that will allow the public to participate in the planning process and ensure that their opinions can influence decisions about water management during IRWMP development. Interested members of the public will have many opportunities to provide input throughout the IRWMP process at regularly scheduled meetings and on the Gateway Authority website. As the governing board of a special district, the Gateway Authority will evaluate and respond to public comment.

# **Public Meeting on Draft IRWMP**

Within two weeks after the draft IRWMP has been made available, a hearing will be held for the general public to address concerns and provide their comments on the IRWMP. Members of the Gateway Authority and its consultant will answer questions and facilitate public involvement.

# Monthly and Special Gateway Authority Meetings

The Gateway Authority will meet on a monthly basis throughout the preparation of the IRWMP. Stakeholders will be invited to attend and participate and public announcements

will be made to encourage public involvement. Special meetings for plan actions and workshops will be held as necessary.

#### 5.1.22 Tribes

Government Code requires local governments to consult with California Native American Tribes identified by the Native American Heritage Commission (NAHC) for the purpose of protecting, and/or mitigating impacts to cultural places. The Gateway Authority has contacted NAHC and has received a list of representatives for the Gabrieleno-Tongva Tribe. These contacts will be notified of all meetings and activities and invited to participate as a stakeholder during and after the IRWMP development. There are no tribal reservations or facilities within the Gateway Region.

# 5.1.23 Disadvantaged Communities

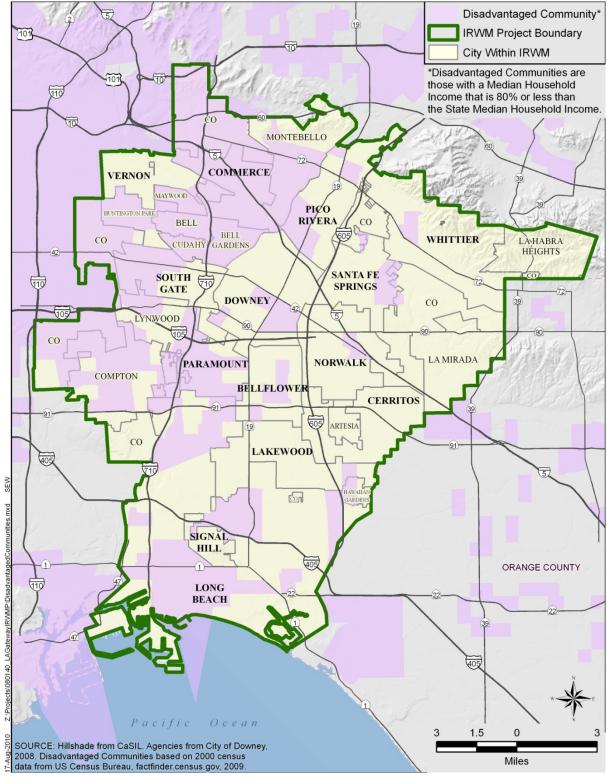
The census tracts and census blocks were analyzed to determine the Median Household Income (MHI) for the area. Table 5-2 presents the MHI and other information by city for the Gateway Authority. Some of the cities, specifically Paramount and South Gate, have MHIs below the threshold of 80 percent of the statewide MHI (\$37,994), the current ceiling for disadvantaged status. Figure 5-4 shows the Disadvantaged Communities in the region by census tract. Overall, about 47 percent of the households within the Gateway Region are classified as disadvantaged, and by population, nearly 51 percent of the people in the regions live in a disadvantaged neighborhood.

Disadvantaged communities in the region are directly represented by the cities in the Gateway Authority and as such will be full members in the development of the IRWMP. They will provide input, comment and participate in decision-making. It should be recognized that this participation is designed to ensure that the water supply and water quality of these communities are protected and enhanced.

The Gateway Authority will employ specific mechanisms to assist DACs and to encourage their participation in the IRWMP development process. Participation in the collaborative stakeholder plan development process will be allowed regardless of the ability to contribute financially to the plan.

While the Gateway Authority provides a legal framework for governance, accountability and the authority to implement an IRWM plan, this governance structure does not serve to limit or exclude. Rather, the Gateway Authority governance structure provides the support for participation by stakeholders, organizations, agencies, and cities that cannot or do not sit on the board. This support is best exemplified by the recent \$10 million ARRA-funded project to satisfy the Los Angeles River Trash TMDL. The grant was applied for and is managed by the Gateway Authority, but 10 of the 16 beneficiary cities were not members of the governing board at the time of application and grant award.

Figure 5-4 Disadvantaged Communities within the Gateway Region 101



# 5.1.24 Use of Existing Planning Processes

The planning documents in the region will be assembled and reviewed. These documents include:

- Regional Planning Documents
- Local Water Supply Planning Documents, including UWMPs
- Environmental Impact Reports Related to Water Supply Planning
- Institutional Planning Documents
- Water Quality and Flood Control Documents
- Flood Control Plans and Agreements

# 5.1.25 Agency Coordination

Water users in the Gateway Region have worked together for years in various arenas. Coordination and cooperation is demonstrated by numerous interconnections between agencies and flexibility in groundwater adjudication in helping neighboring agencies. The successful formulation of the Gateway Authority and its recognition as a regional entity shows the region's desire to work closely together on water planning issues.

Of course, regionally, there are several agencies and organizations that conduct planning activities that must collaborate to deliver a truly integrated plan for the area. Other planning efforts in the region include those related to land use planning, water wholesalers, county agencies, neighboring jurisdictions, other joint power authorities, such as councils of governments, and other watershed organizations. It is important to structure the IRWMP process to allow and encourage effective coordination between planning efforts. The Gateway Authority is well aware that the IRWMP planning process should and must consider these other activities. This necessary coordination will prevent duplication, avoid missed opportunities, and make sure there are no gaps in the plan. The plan integration process should:

- ensure other planning agencies participate as stakeholders in the IRWMP (This would mean not just inviting, but strongly, actively encouraging participation)
- seek common objectives between planning efforts where possible
- collect common information that can be shared by agencies
- look for joint strategies between plans
- tier or coordinate actions between agencies so they complement each other and address mutual objectives
- seek out and minimize duplication in planning efforts
- incorporate agencies as funding partners where strategies align
- check back with agencies after compilation of the IRWMP to ensure no conflicts exist

Coordination and Cooperation with Agencies and with Land-Use Planning Decision Makers

Because the Gateway Authority is comprised largely of municipalities responsible for management of both water and land use, local land-use planning decision makers will be integrally involved in formulation of the Plan. The work plan includes review steps on water management strategies and projects, including Project Feasibility and Other Factors where the review of water management alternatives and land use decisions will be integrated. This will ensure continual reevaluation of the interactions between water management strategies considered in the Plan and land use. This is a Program Preference for the Proposition 84 IRWMP Program, but more importantly, it is an efficient, effective tool in ensuring the IRWMP best addresses regional needs.

#### Water Wholesalers

Both the MWD and the CBMWD provide imported water to local purveyors in the Gateway Region. Their planning programs and planned investments will affect future work within the region, and provide opportunities to help address IRWMP objectives. CBMWD's Conservation Master Plan and its plans for increased recycling of wastewater are good examples of planning efforts that will touch the IRWMP process.

# **Neighboring Plans**

The Santa Ana Watershed Project Authority (SAWPA) and the GLAC IRWM planning efforts may have projects that could affect future Gateway Region strategies.

## Other Agencies

The Gateway Cities Council of Governments (Gateway Cities COG) and Southeast Water Coalition (SEWC) are both examples of other agencies that require planning coordination with the IRWMP. The Gateway COG, while not specifically dealing with water resources, does study and address various water issues (such as storm water, water quality, transportation, and regional open space) as directed by its members. Close coordination with these organizations is important to ensure effective regional planning.

# 5.1.26 Program Preference and Statewide Priorities

The LA Gateway IRWMP development will address a number of water related Program Preferences and Statewide Priorities (Guidelines, Pages 12, 13, 14). The following list summarizes what preferences/priorities are included and where in the work plan tasking they are addressed:

## **Preferences**

• Include Regional Projects or Programs (CWC §10544) - Task 4.5 Develop Integrated Management Strategies for Region

# Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program -

Water Supply Reliability through Water Use Efficiency strategies and projects: Task 4.5 Develop Integrated Management Strategies for Region

# • Address critical water supply or water quality needs of disadvantaged communities within the region-

Task 4.11 DAC Issues Review

# • Effectively integrate water management with land use planning-

Task 4.7 Project Feasibility and Other Factors Review

# **Statewide Priorities**

# • Drought Preparedness-

Water Supply Reliability through Water Use Efficiency strategies and projects: Task 4.5 Develop Integrated Management Strategies for Region

# • Use and Reuse Water More Efficiently-

Task 4.5 Develop Integrated Management Strategies for Region

## • Climate Change Response Actions-

Task 4.10 Climate Change Vulnerability and Mitigation Review

# • Expand Environmental Stewardship-

Environmental and Habitat Protection and Improvement Projects-Task 4.5 Develop Integrated Management Strategies for Region

## • Practice Integrated Flood Management-

Task 4.3 Compile and Analyze Storm Water Runoff Information and Task 4.5 Develop Integrated Management Strategies for Region

## • Protect Surface Water and Groundwater Quality-

Task 4.4 Compile Existing Water Quality Information
Task 4.5 Develop Integrated Management Strategies for Region

# • Ensure Equitable Distribution of Benefits-

Task 4.9 Environmental Justice Review Task 4.11 DAC Issues Review

# 5.2 Work Items

The Gateway Authority is proposing a logical process for creating a useable IRWM Plan based upon the need to solve water management issues in an all-inclusive approach, first by gathering information and listening to all interested parties, then building and refining Plan objectives, looking at issues, then reviewing and choosing appropriate water management strategies to address those issues. Those strategies are then advanced by brainstorming, creating, and refining projects that support the strategies and meet all or part of the issue needs. Project development is not a simple collection ranked projects submitted by participants.

Projects are then filtered through a number of review steps (that may happen concurrently) to ensure they meet the objectives of the Plan and the IRWMP standards and intent.

- Are the projects individually feasible?
- Are they or can they be integrated with other projects being brought forward in the Plan, or with other regions' projects and elements of plans from those other regions?
- Are they sensitive to Environmental Justice issues?
- Are they vulnerable to possible climate change effects?
- Are the projects fair and supportive to disadvantaged communities?

Projects may be modified, revised, or rejected based on these reviews and can then be prioritized across the region in public meetings and according to established criteria. That prioritization is a critical part of the open collaborative process with the Gateway Authority, stakeholders and the public. Impacts and benefits of the suite of projects will be determined. Following this step, an Implementation and a Financial Plan will be developed for inclusion in the IRWMP. To maintain the accuracy and relevancy of the Plan, data collection, data management, analysis, and future monitoring are all necessary. A program to monitor the Plan is also required. Thus, to develop a meaningful, responsive IRWMP for the Gateway Region, 8 tasks have been outlined (with supportive sub-tasks), which correspond to the Budget and Schedule presented later in Chapters 6 and 7.

# 5.2.1 Task 1—Continued Formulation of the Gateway Authority: The Regional Water Management Group

The Gateway Authority was formed to act as the Regional Agency for the Gateway Region, to prepare an IWRMP and act as the lead agency responsible for applying for Proposition 84 Planning and Implementation Grant Funding. Each participating agency's governing board (City Council or Board of Directors) has authorized the agency to participate in the planning process and assigned staff to participate in the Gateway Authority. The Gateway Authority

will be responsible for developing the IRWMP including public outreach, oversight and review of the draft plan, briefing their governing boards about its development, obtaining its adoption, and coordinating with the DWR and SWRCB. The Gateway Authority's Board of Directors is currently composed of representatives from the following agencies:

- City of Bellflower
- City of Bell Gardens (as of 10/14/10)
- City of Cerritos
- City of Commerce
- City of Downey
- City of Lakewood
- City of Long Beach
- City of Norwalk
- City of Paramount
- City of Pico Rivera
- City of Santa Fe Springs
- City of Signal Hill
- City of South Gate
- City of Vernon
- City of Whittier
- Central Basin Municipal Water District (Central Basin or CBMWD)
- Long Beach Water Department
- Southeast Water Coalition (SEWC)

Additional agencies are expected to join at a later date by indicating their support of the planning process through a resolution approved by their governing boards.

# 5.2.2 Task 2—Public Involvement Process and Meetings

A broad and extensive public involvement component has been developed for this planning process. The process includes the following items and activities:

## 5.2.2.1 Task 2.1— Initial Public Meeting

As part of the Public Involvement Process, the Gateway Authority plans to hold a public meeting to solicit input from the community regarding the preparation of an IRWMP. Announcements of the meeting will appear in the local newspaper and on Gateway Authority members' web pages, inviting all members of the public to attend.

The purpose of the meeting is to present the public with information about the proposed IRWMP planning process and receive comments from interested parties. The presentation will describe the region encompassed by the IRWMP. Gateway Authority members will be at the meeting to answer questions, solicit input, and increase public awareness of the proposed IRWMP. Documentation of the meeting and the comments received from the public will be recorded and made available to the public.

## 5.2.2.2 Task 2.2— Develop Stakeholder List and Involvement Plan

At the beginning of the process, the Gateway Authority will prepare and expand a list of stakeholders for the region. The Gateway Authority will develop a method and process that will allow the stakeholders to participate in the planning process, ensure that their opinions can influence decisions about water management, and allow additional stakeholders to be identified and included during IRWMP development. Working groups will be established and empowered. Because meetings will be regularly scheduled throughout the IRWMP process, interested stakeholders will have many opportunities to provide input during the development of the IRWMP.

At this time a complete representative group of stakeholders has not been identified. The Gateway Authority will develop a process to reach all stakeholders and to identify additional stakeholders in the region throughout the Plan process. The potential stakeholders are listed in three categories (1) Regional stakeholders, (2) Watershed-based stakeholders, and (3) Federal and State stakeholders, all of whom will be encouraged to participate throughout development of the Plan. Given the Gateway Region's high-need population, where many communities and entire cities are classified as disadvantaged, significant effort will be made to facilitate inclusion of this often-underrepresented stakeholder group.

The Gateway Authority will initially contact stakeholders in writing to notify the stakeholders when the meetings are held for the Plan and encourage their participation. By participating in these meetings, stakeholders will have a forum for comment and input throughout the development of the Plan. Additional stakeholders will be identified and included in the planning process based on attendance at meetings, other expressions of interest from the stakeholder, or invitations initiated by the participants in the Gateway IRWMP process.

## Regional Stakeholders:

Other Gateway Cities The Gateway Region includes 26 cities that share water concerns and challenges. While 14 cities are current members of the Gateway Authority governing board, not all of the cities in the Gateway Region have yet become governing board members primarily because limited financial resources prevent them from participating in any means of planning which have matching fund requirements. Regardless of whether or not they choose to participate on the Board of Directors, the following cities are important stakeholders and will be participants in the IRWMP development process:

- Artesia
- Bell
- Compton
- Cudahy
- Hawaiian Gardens

- Huntington Park
- La Habra Heights
- La Mirada
- Lynwood (is expected to become a member before the end of the year)
- Maywood
- Montebello

<u>Water Companies</u> In addition to the many cities that are water retailers, there are a number of water companies among the water suppliers in the region. These purveyors are certainly stakeholders on water supply issues in the region. The following entities serve portions of the Gateway Region:

- Golden State Water Company
- San Gabriel Water Company
- California Domestic Water Company
- Suburban Water System
- Park Water Company
- Bellflower-Somerset Mutual Water Company

Water Wholesalers and Groundwater Suppliers Most cities and water purveyors within the Gateway Region get a portion of their raw water supply from water wholesalers. Wholesalers, in turn, buy water from other wholesalers, obtain water from the California State Water Project, or import water from the Colorado River. Almost all retailers use groundwater as a source as well, which requires involvement of the groundwater management agencies. The following water wholesale agencies could be stakeholders in an integrated regional plan:

- Metropolitan Water District of Southern California (MWD)
- Water Replenishment District of Southern California (WRD)
- Central Basin Municipal Water District (CBMWD) –(current member)

#### Watershed-Based Stakeholders:

- Environmental advocates (Amigos de Los Rios [with which Gateway Authority already has an MOU], Heal the Bay, Sierra Club, Friends of the Los Angeles River, Friends of the San Gabriel River)
- Watershed organizations (Los Angeles and San Gabriel Rivers Watershed Council, National Water Resources Association, Urban Water Institute, Southern California Water Committee, Center for Watershed Protection, Local government organizations (Gateway Cities COG, Southern California Association of Governments [SCAG], Los Angeles County Flood Control District, Los Angeles County Sanitation Districts, Santa Fe Springs Community Development Commission, and other city departments)
- Businesses (Chambers of Commerce and Workforce Investment Boards)

 Industry (including the Port of Long Beach, a department within the City of Long Beach)

## State and Federal Stakeholders:

- California Department of Water Resources (DWR)
- State Water Resources Control Board (SWRCB)
- Los Angeles Regional Water Quality Control Board (LARWQCB)
- San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC)
- California Department of Fish and Game (DFG)
- U.S. Fish and Wildlife Service (USFWS)
- U.S. Army Corps of Engineers (USACE)
- U.S. Bureau of Reclamation (USBR)

As part of the Stakeholders and Public Outreach, the Gateway Authority will update its web page to include share-file capabilities, a calendar of IRWMP events and a question/comment exchange area so that interested parties can stay informed and participate even if they cannot attend meetings. For special meetings and important events, the Gateway Authority will distribute notices by e-mail. The budget includes \$15,000 for initial upgrades and continuing maintenance to the IRWMP website. Documents for public review will be available at libraries and from Gateway Authority members. Further details will be developed in the Involvement Plan in this task.

#### 5.2.2.3 Task 2.3— Public Meeting on Draft IRWMP

Within two weeks after the draft IRWMP has been made available, a hearing will be held for the general public, stakeholders, and water interests in the region to address concerns and provide their comments on the IRWMP. Staff and members of the Gateway Authority and the consultant will answer questions and facilitate public involvement. Public Notices will direct interested parties to websites where the Plan will be available electronically and to public locations where hard copies will be available for review.

# 5.2.2.4 Task 2.4— Monthly and Special Gateway Authority Meetings

The Gateway Authority has met and will continue to meet on a monthly basis throughout the preparation of the IRWM Plan. Noticed at least 72 hours in advance and open to the public, these meetings will be used to review specific tasks, collect comments on work products, and make decisions and guide the IRWMP development process. Special meetings for plan actions and workshops will be held as necessary.

## 5.2.3 Task 3—Solicit and Hire Consultant

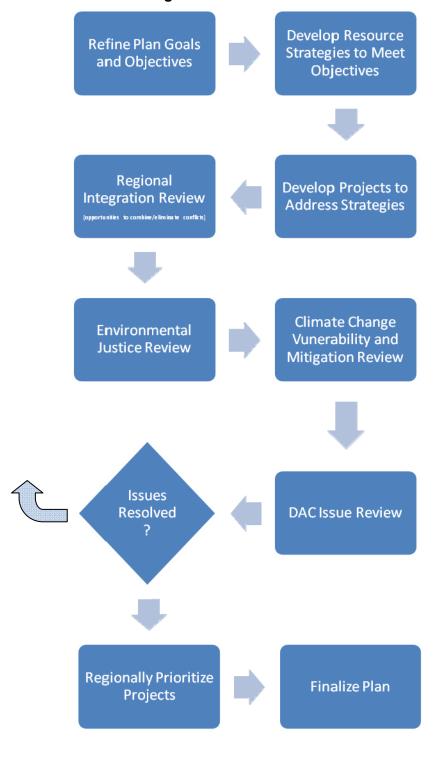
The Gateway Authority will develop a Request for Proposals that will be mailed to qualified consulting firms. After reviewing the proposals, the Gateway Authority will select the most qualified consulting firms to assist in the preparation of the Plan.

# 5.2.4 Task 4—Consultant Prepares Draft IRWMP Materials

The consultant will provide guidance on the Gateway Region's development of a Plan by leading a number of working sessions to bring about a common understanding of the regional issues, objectives, and water management strategies and to formulate a framework for the IRWMP. The sessions will be "all hands" meetings, moderated by the consultant, who will meet with the group to develop a detailed table of contents and to refine the schedule for development of the Plan. The consultant will also provide guidance on enhancing and using various tools to evaluate and enhance water management strategies.

Throughout the preparation of the IRWMP, the consultant will regularly brief the Gateway Authority on the status of the work and receive their comments on the elements of the IRWMP as they are drafted. It is expected that the Gateway Authority and the consultant will participate in working sessions where ideas are put forth and scenarios for water management are evaluated. The group will determine scenarios for integrating management strategies, based on the different needs of the member agencies. The consultant will prepare a draft IRWMP as guided by the table of contents. Some of the work items under this task that may need special consideration while developing the IRWMP include those in Figure 5-5, Work Flow.

Figure 5-5 Work Flow



# 5.2.4.1 Task 4.1—Refine and Enhance Planning Objectives for IRWMP – Include Climate Change, Flood, and Governance Issues

The purpose of this task is to develop specific planning objectives based on:

- Previous regional efforts
- Local planning documents, such as Urban Water Management Plans
- Studies performed by the Gateway Authority
- Discussions among Gateway Authority and stakeholders

Preliminary information shows that the Plan must be designed to provide a roadmap for long-term water supply reliability and water management in the region, as well compliance with 20x2020 water efficiency goals and CWC §10540(c). Therefore, at a minimum, objectives of the Plan are likely to include:

- Water supply reliability/ Water Use Efficiency Groundwater management
- Ecosystem restoration and protection
- Water quality consideration and protection Storm water
- Water-related needs of DACs

Additional objectives are likely to be included early in the Plan development process through the avenues listed at the beginning of this section. Furthermore, updated legislation regarding the State's IRWMP process necessitates that the IRWMP give special attention to the following:

- Climate change
- Integration of storm water flooding
- IRWMP governance
- Integration with land use planning
- Statewide water management priorities

# 5.2.4.2 Task 4.2—Water Budget Development

Developing a water budget or water balance is essential to determine how future population and economic changes may affect water supplies. This task will outline future water demands based on projected growth in population, changes in land use, and changes in water consumption patterns resulting from demand management activities, and compare those demands with future water supply options. The water balance will be used to identify gaps between projected demands and reliable supplies, and will be a primary tool in the creating integrated water management strategies designed to secure water supply reliability for the region.

Task components will be based upon population, land, and water use data available from Gateway Region stakeholders, primarily from the UWMP of water purveyors. Data to be used in development of the water budget will include:

- Documentation of historical, present, and projected land uses within the region
- Documentation of historical, present, and projected water uses within the region including urban, agricultural, and environmental water uses
- Identification of additional water needed to support future demands and of infrastructure required to support this additional supply

# 5.2.4.3 Task 4.3—Compile and Analyze Storm Water Runoff Data

As storm water management and treatment has already been identified as an important objective of the region, some cataloging and compiling of storm water and flooding information will be necessary. Data collected would include specific regional and local problem sites, information on best management practices, and existing storm water management practices. This compilation will aid strategizing alternatives for this issue.

Work on this task along with Task 4.5 will support the State's priority to integrate flood management with other water management issues in the region.

# 5.2.4.4 Task 4.4—Compile Existing Water Quality Information

Protection of water supply and water quality has also been identified as an objective of the Plan. A brief review of the region's available water quality data, including groundwater and surface water supplies, will be made to identify priorities, locate data gaps, and provide a basis for suggesting future water quality protection and improvement activities and strategies.

This task of the Work Plan supports the State's goal and priority to protect surface water and groundwater quality.

#### 5.2.4.5 Task 4.5—Develop Integrated Management Strategies for Region

Once the water balance, storm water information, and water quality data have been developed, management strategies can better be examined. Options will be evaluated in the context of individual and integrated water management strategies to determine those that generate the greatest regional benefits at acceptable levels of impact and cost. Regional benefits will be framed using the multi-objective criteria to be developed in Task 4.1.

In developing water management options, each of the water management strategies suggested by DWR in the State Water Plan Update and IRWMP Guidelines document will be examined to determine their applicability as part of an integrated approach to meeting future demands. Candidate strategies or groups of strategies will be assembled into strategic options and decision support methodologies will be applied to assist local decision makers in identifying options that are responsive to the objectives of the Plan.

Use of decision support methodologies will be important for framing strategic options in ways that clearly identify the advantages and disadvantages of each option and that describe the interrelations between various elements within each option. This method will present key issues and potential solutions to stakeholders in a manner that facilitates discussion, enables participants to focus on central issues, and leads to well informed, insightful decision making. The goal of this process is to ensure that the strategic options that move forward in the planning process are technically sound and broadly supported. Clearly framing strategic options allows the formulation of specific questions that can be used to evaluate strong strategic options or to reinforce concerns regarding more problematic options.

The outcome of this task will be the formation of water management strategies that are most likely to meet the objectives of the Gateway Region and that should be considered in the Plan. Because the Plan is intended to meet multiple water management objectives, multiple strategies will be identified. Therefore, an important aspect of this task will be to describe how individual strategies will be integrated into a strategic option that presents a cohesive program for basin-wide water management.

Work under this task addresses many statewide water management priorities as well as IRWMP program preferences. This work task will:

- include Regional Projects or Programs in the strategies
- contribute to the CALFED Bay-Delta Water Reliability Program Objective through including Water Use Efficiency strategies and projects
- address Drought Preparedness and Using and Re-using Water More Efficiently by considering Water Use Efficiency strategies
- deal with Expanding Environmental Stewardship by looking at environmental stewardship strategies
- practice Integrated Flood Management by including flood elements
- incorporate strategies which help that help Protect Surface and Groundwater Quality

## 5.2.4.6 Task 4.6—Develop Projects to Address Strategies

Once individual water management strategies and integrated strategic options have been developed, the stakeholders will begin generating project ideas to achieve these strategic

options. Projects will be diverse in nature and will attempt to encompass many issues to satisfy the Gateway Region's strategic options and water management strategies. Projects will be blended and combined to the fullest extent possible in order to maximize their effectiveness, and the possibility for linking with projects suggested in the future will be taken into consideration when reviewing proposed projects.

# 5.2.4.7 Task 4.7—Project Feasibility and Other Factors Review

Following identification of project alternatives, a review of individual project feasibility will be undertaken. An important question will be whether the project is generally feasible and cost effective to build or employ. The reconnaissance-level (at minimum) review will use all available information, including a consideration of land use planning, as part of this task. Because the extent to which a project contributes to the overall strategy of the Gateway Region's effective regional water management is an important factor in project selection, the following items are among those that will be considered in project feasibility analysis:

- Economic feasibility
- Benefits and impacts
- Technical feasibility
- Risk factors
- Adaptability
- Deliverables

This task will provide the direct opportunity to address the IRWMP program preference of effectively integrating water management with land use planning by considering land use planning within the review.

## 5.2.4.8 Task 4.8—Integration Review

This task reviews the project in relation to other projects in the IRWMP development as well as all the needs and strategies of the Gateway Region and other regions. In this task, the consultant (with stakeholder oversight) will examine whether the proposed project would interfere with other proposed projects or other needs, infrastructure, programs, or stakeholders in the Gateway Region or in neighboring regions. The consultant will also investigate whether opportunities exist to combine projects or expand them to provide additional benefits. An analysis of how the project fits within the whole of the plan will be made, along with an explanation of how a project can be expanded or reduced to better fit the overall needs of the region or neighboring regions. This task takes significant effort because it requires looking at all projects from different levels and perspectives to determine and evaluate various combinations of alternatives.

#### 5.2.4.9 Task 4.9—Environmental Justice Review

The purpose of this task is to complete an environmental justice project review. Proposed projects will affect stakeholders differently throughout the region. For instance, a project could ensure water reliability or water quality for some stakeholders but generate additional particulate emissions or adversely impact air quality in other stakeholder regions. Because of the myriad benefits and consequences, an environmental justice review will identify whether there is potential for unfair distribution of environmental burdens and access to environmental goods, and attempt to correct that unequal distribution. This task directly contributes to the statewide priority of Ensuring Equitable Distribution of Benefits.

# 5.2.4.10 Task 4.10—Climate Change Vulnerability and Mitigation Review

Climate change vulnerability is a large "unknown" as the Gateway Region moves forward with the development of an IRWM Plan. Therefore, a review of the climate change vulnerability of the region and mitigation strategies will be undertaken for each project. The consultant will employ a climate change specialist to compile the most likely range of scenarios that may occur for the region based upon the most recent scientific data and industry trends. Current information from DWR and other reputable sources will be included in the scenarios. The climate change specialist and consultant team will also review each proposed project to look for vulnerability to climate change and suggest ways to mitigate for this potential impact. The State has not reached a definitive approach so the work task must be flexible to accommodate potential changes, and the Plan must be adaptable for future developments in climate change vulnerability analysis. The specialist will provide information and recommendations.

The climate change vulnerability review process will include input from members of the Gateway Authority, Gateway Region stakeholders, and the general public. This review will provide a summary of the analysis of each project as well as the potential strategies to mitigate the effects of environmental change over time. The summary will also highlight the delicacy of the water supply and ways to strengthen and protect it in the event of extreme environmental change.

A general qualitative look at the typical effects of climate change has been performed, and provides the basis for the analysis. Table 5-4 shows the general climate change vulnerability categories developed for the state, and has been condensed to reflect categories characteristic of the Gateway Region. During the Gateway Region's development of its IRWMP, it is anticipated that DWR will further refine the IRWMP climate change standards. Therefore, the IRWMP will need to build in flexibility and adaptive management elements to allow for unforeseen or yet—to-be quantified effects of climate change on the water management needs of the region.

Table 5-4 Potential Climate Change Vulnerabilities for the Gateway Region

	Higher Temperatures	Earlier Snowmelt	Decrease in Snow Amount	More Rain, Less Snow	More Extreme Flood Events	Longer, More Frequent Droughts	Decrease in Freeze Events	Sea Level Rise	More Erosion	More Frequent & Intense Wildfires
	l '	Less imported supply	Less imported supply; poor water quality	More floodplain inundation; levee stress	Levee stress/failure	Less supply; higher demands	Higher agricultural demands	Levee stress/ failure; saltwater intrusion	Levee stress/ failure; poor water quality	Less imported supply; higher demands
		supply	Water quality altered, less imported supply	More allergens Structural	spread of disease; mortality; Structural	prevalence & spread of disease; mortality; less	Pesticide use increases; allergens increase Higher	Displacemen t; poor water quality Structural	displacem ent Structural	poor water quality; displacement Structural
Infrastructure	demand Marine foodweb disruptions; fishery	reduced	Power supply reduced	damage more likely	damage more likely Water quality reduced;	Higher energy demand	energy demand	damage in coastal  Flooding & inundation;	more likely Poor water	Higher
Coastal Resources	impacts; biodiversity shift	N/A	N/A	N/A	sediment transport altered	Water quality reduced	N/A	displacement ; reduced tourism	quality; displace- ment	demands; biodiversity shifts

#### 5.2.4.11 Task 4.11—DAC Issues Review

The Gateway Region is a high-needs population with a significant number of Disadvantaged Communities (DACs). Therefore, DAC issues and response strategies will be an everpresent factor throughout the IRWM Plan formation process, especially during the review of the IRWMP proposed projects. This review process will take into account the unique needs of the various DACs in the Gateway Region and verify those needs are met or mitigated through the IRWMP. During the completion of this task, attention will focus on whether projects will help or hinder DACs. Identification and consideration of water-related needs of DACs may include needs assessments, initial engineering design and study of project(s), and feasibility studies. DACs are special constituents within the larger framework of the Gateway Region and the opportunity for DAC assistance and input regarding projects will also be reviewed in this process. One particular benefit of the Gateway Authority structure is that representatives of DACs participate on the Board of Directors in addition to the myriad stakeholder participation opportunities. Thus, DAC outreach and collaboration is woven through the entire Gateway Region IRWMP development, and supports the program priority, "Ensure Equitable Distribution of Benefits", for the Proposition 84 IRWMP Program as well as the program preference of addressing critical water supply or water quality needs of disadvantaged communities within the region.

# 5.2.4.12 Task 4.12—Conduct Project Prioritization and Review Process

Prioritizing projects for the region is a distinct task in the IRWMP development process and it requires a collaborative, open forum where stakeholder and public participation are included and supported. As with all of the tasks in the IRWMP development, the entire project prioritization process will be documented, including guidelines and criteria, and will be accessible and understandable for regional stakeholders and the public. It will include:

- Procedures for submitting projects
- Procedures for reviewing projects
- Procedures for communicating project selection

Once the process of ranking and prioritizing projects is adopted, individual projects will be prioritized collaboratively using the process. Stakeholders and the public will be able to follow, understand, and review project rankings and see explanations for the rankings. All projects under consideration must satisfy Plan Objectives and present a wise investment for regional and State funding. This is an important step in the IRWMP development and must reflect an open, transparent process.

## 5.2.4.13 Task 4.13—Develop IRWMP Implementation Component and Financial Plan

Following project prioritization, a proposed implementation schedule that extends beyond the adoption of the Plan will be created. A finance plan will also be developed to identify potential sources of funding for the projects and continued implementation of the Plan. The finance plan will be designed to have an appropriate weighting and scheduling of local and external funding.

#### 5.2.4.14 Task 4.14—Determine Impacts and Benefits of IRWMP

A process is necessary for determining the impacts and benefits of Plan creation and implementation as well as for complying with the California Environmental Quality Act (CEQA). As a component of the decision support methodology described in Task 4.5, which will allow stakeholders to systematically review the potential benefits and impacts of various groups of water management strategies, this step will introduce impact analysis and CEQA compliance into selection of appropriate strategies. Inclusion of Gateway Region stakeholders in the planning process provides a structure for identification of impacts both within the region and in adjacent areas.

# 5.2.4.15 Task 4.15—Review Groundwater Monitoring Program

Because groundwater is an important resource for the Gateway Region now and in the future it needs to be protected. Continued good water resources management and other elements of the IRWMP depend upon its reliability. Therefore, the IRWMP must ensure adequate monitoring of groundwater resources. This task provides for monitoring and data collection as needed to monitor the resource into the future. The IRWMP may well include recommendations for using groundwater monitoring data to improve the operation of pumping and recharge facilities in the region and perhaps expand the current groundwater monitoring efforts, including groundwater quality.

# 5.2.4.16 Task 4.16—Develop Data Management Methods

Data collected and developed during this planning process will be shared among participants and will be available to DWR. As appropriate, data and reporting will be posted on a project website as part of the stakeholder and community participation program. This task will include consolidation of existing data from Gateway Region stakeholders and may include recommendations for data collection, quality control, reporting, and analysis to be undertaken as an element of the implementation program. The consultant will employ a data system management specialist to prepare an appropriate method and platform to allow the Gateway Authority and stakeholders access to information compiled in the development of the Plan.

## 5.2.4.17 Task 4.17—Develop Plan Monitoring

This task develops a process and protocol to monitor the Plan implementation. The Gateway Authority and stakeholders need to know how the Plan is being implemented and how steps

defined in the Plan are being accomplished so that they may continue or adjust the Plan accordingly. The IRWMP process must not only develop the Plan but also consider and determine a method of measuring the success of the Plan and its implementation. This task will include the development of metrics and procedures to measure at least the following:

- Plan objectives
- Stakeholder outreach and involvement
- Monitoring systems
- Mechanisms to change implementation based on the data collected

# 5.2.5 Task 5—Draft IRWMP for Gateway Authority

# 5.2.5.1 Task 5.1—Prepare Administrative Draft IRWMP

The Consultant retained by the Gateway Authority to assist in the IRWMP process will prepare an Administrative Draft IRWMP text for review.

# 5.2.5.2 Task 5.2—Review Administrative Draft By Participating Agencies – Gateway Authority

When the first draft of the IRWMP has been completed, the staff/representatives of the Gateway Authority will review it to ensure that all of the planned objectives have been met. When the group is satisfied with the draft IRWMP, the consultant will incorporate all necessary edits and the draft IRWMP will be submitted to the various agency boards for review. Following completion of the administrative draft IRWMP, the Gateway Authority staff/representatives will brief their respective Board of Directors. The respective boards will follow standard procedure of reviewing the draft IRWMP and then presenting it the public and because the Gateway Authority will provide status updates on the IRWMP during its preparation, the comments received from the various agency boards are anticipated to be minimal, and the public draft IRWMP will be released to the public shortly after being presented to the various Boards and their comments are addressed.

# 5.2.5.3 Task 5.3— Gateway Authority Review and Approval of Administrative Draft IRWMP

After checking for completeness and ensuring that the IRWMP satisfies the requirements of the Integrated Regional Water Management Planning Act and Proposition 84, the Gateway Authority will then approve the release the draft for public review and comment.

## 5.2.5.4 Task 5.4—Approval by Gateway Authority for Public Release of IRWMP

The Gateway Authority must approve the release of the IRWMP draft for public review and set a deadline for comments from stakeholders and the general public.

# 5.2.6 Task 6—Draft IRWMP for Public Review

#### 5.2.6.1 Task 6.1—Public Draft of IRWMP

The consultant will prepare a draft IRWMP for public review. Its availability will be announced in the local newspaper with information as to where the public can view a copy. The Gateway Authority will provide a link to download the IRWMP on their websites, and copies will be available in local libraries. While the Gateway Authority will set the duration of public review on its release, a 30 day review period is anticipated.

# 5.2.6.2 Task 6.2— Review and Incorporate Public Comments into IRWMP

The Gateway Authority (or its ad-hoc committee) and the consultant will review the public comments, incorporate them into an appendix to the IRWMP, and present a revised draft IRWMP to the Gateway Authority.

# 5.2.7 Task 7—Prepare Final IRWMP

## 5.2.7.1 Task 7.1— Consultant Prepares Final IRWMP

The consultant will incorporate the Gateway Region participant resolutions adopting the IRWMP into an appendix to the IRWMP. The consultant will produce the required number of hard copies, as well as electronic copies of the final IRWMP, and distribute the requested number of copies to the Gateway Authority and Gateway Region stakeholders.

# 5.2.7.2 Task 7.2—Adoption of IRWMP by Participating Agencies' Governing Boards

The governing boards of the participating agencies will have one final review of the IRWMP. It is anticipated that within two months of receiving the final IRWMP, the governing boards will adopt it.

#### 5.2.7.3 Task 7.3— Final IRWMP Submitted to DWR/SWRCB

The final IRWMP will be submitted to the DWR and SWRCB pursuant to the guidelines.

#### 5.2.7.4 Task 7.4—Prepare Copies of Final Report

In this task, both paper and electronic copies of the final report will be published for distribution.

# 5.2.8 Task 8—Project Administration and Management

#### 5.2.8.1 Task 8.1 Contract Administration

The Gateway Authority is responsible for the overall contract administration. Some of the activities associated with this task include:

- Administration of the contract with DWR
- Issuing task orders to consultant
- Administration of the contracts with other agencies, vendors, or individuals

# 5.2.8.2 Task 8.2 Project Management

The Gateway Authority provides project management activities, which include:

- Reviewing the consultant's work plan and progress
- Reviewing project budget and schedule
- Reviewing consultant invoices

The consultant provides project management activities, including:

- Preparing and submitting invoices
- Review of all project work
- Coordinating with Gateway Authority member agencies and other stakeholders

# 5.2.8.3 Task 8.3 Project Reporting

The Gateway Authority is responsible for the project reporting which includes:

- Providing monthly reports to Gateway Authority member agencies and other interested parties and stakeholders
- Providing quarterly reports to Grant Administrator Consultant and Gateway Authority Staff will prepare and submit quarterly reports to DWR, as defined by the grant agreement

The agencies are responsible for the project reporting which includes:

- Providing monthly reports to their governing boards, other interested parties, and stakeholders
- Providing monthly reports to the Gateway Authority

#### 5.2.9 Work Item Submittals

As described in the work items above, deliverables include:

- Presentations at two public meetings/hearings
- Draft IRWMP
- Final IRWMP
- Quarterly presentations by agency representatives to governing boards
- Quarterly progress reports to the grant administrator as required